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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte NAGARAJ JAYANTH and HUNG PHAM

Appeal 2007-2380
Application 10/776,856
Technology Center 3700

Decided: March 31, 2008

Before TERRY J. OWENS, JENNIFER D. BAHR, and
DAVID B. WALKER, *Administrative Patent Judges.*

OWENS, *Administrative Patent Judge.*

DECISION ON APPEAL

The Appellants appeal from a rejection of claims 1, 9, 10 and 14. Claims 2-8, 11-13 and 15 also are pending, but the rejections of those claims are not appealed.[1]

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[1] The Appellants' sole statement in the "Grounds of Rejection to be Reviewed on Appeal" section of the Brief is: "1. Whether the combination of Sharood et al. (U.S. Pat. No. 6,453,687) in view of Wiggs (U.S. Pat. No. 4,463,571) establishes a prima facie case of obviousness under

THE INVENTION

The Appellants claim a diagnostic system and method for a compressor. Claims 1 and 10 are illustrative:

1. A diagnostic system for a compressor assembly including a compressor and a motor protector, said system comprising logic circuitry associated with the motor protector and operable to analyze a status of the motor protector as a function of time and identify a specific fault cause.

10. A method for diagnosing a compressor assembly including a compressor and a motor protector, said method comprising:

analyzing a status of the motor protector as a function of time; and

identifying a compressor fault cause based on said analyzing.

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35 U.S.C. § 103(a), with respect to Claims 1-15" (Br. 5). In the Examiner's Answer the Examiner corrects the Appellants' statement of the grounds of rejection on appeal (Ans. 2). The Examiner states that only claims 1, 9, 10 and 14 are rejected over Sharood in view of Wiggs. *See id.* In the Reply Brief the Appellants do not address the Examiner's statement in the Examiner's Answer regarding the rejections on appeal. Neither the Appellants, in the Appeal Brief and the Reply Brief, nor the Examiner, in the Examiner's Answer, mentions the rejections of claims 2-6, 11 and 12 under 35 U.S.C. § 103 over Sharood in view of Wiggs and U.S. 6,158,230 to Katsuki, claims 8 and 13 under 35 U.S.C. § 103 over Sharood in view of Wiggs and U.S. 4,387,368 to Day, claim 7 under 35 U.S.C. § 103 over Sharood in view of Wiggs, Katsuki and Day, and claims 1-14 under the judicially created doctrine of obviousness-type double patenting over claims 5-16 of U.S. 6,758,050 (Final Rejection mailed Oct. 19, 2005, pp. 2-5). Hence, the status of those rejections and the claims subject thereto is not clear. We leave it to the Appellant and the Examiner to resolve this issue upon return of the application to the Technology Center.

THE REFERENCES

Sharood	US 6,453,687 B2	Sep. 24, 2002
Wiggs	US 4,463,571	Aug. 7, 1984

THE REJECTION

Claims 1, 9, 10 and 14 stand rejected under 35 U.S.C. § 103 over Sharood in view of Wiggs.

OPINION

We reverse the Examiner's rejection. We need to address only the independent claims, i.e., claims 1 and 10. Claim 1 requires logic circuitry associated with a motor protector and operable to analyze a status of the motor protector as a function of time and identify a specific fault cause, and claim 10 requires the steps of analyzing a status of a motor protector as a function of time and identifying a compressor fault cause based on the analyzing.

Sharood discloses a retrofit plug (125) that is connectable to a legacy appliance to allow monitoring and control of the appliance by a homeowner without the need for custom or professional installation (col. 8, ll. 14-24). Retrofit plug 125 comprises monitoring circuitry including a measure and transmit circuit (620) that may monitor current draw timing, duration and amount (col. 9, ll. 13-20). Retrofit plug 125 can be designed specifically for a particular appliance and can perform sophisticated diagnosis, monitoring and control specific to the appliance (col. 10, ll. 17-20).

Wiggs discloses (abstract):

> A method and apparatus for monitoring the protective circuit associated with a heat pump system wherein both the high pressure switch on the condenser side of the compressor and the low temperature switch on the evaporator side of the compressor are continuously monitored by a low voltage rectifier circuit which in turn initiates and maintains a signal light indicating which switch caused the heat pump system to turn down.

Wiggs teaches that a high pressure condition may indicate a blockage in the heat pump system, and a low temperature condition may indicate leakage of refrigerant (col. 1, ll. 35-39). When either switch is tripped a lock-out relay is activated which terminates current to the compressor motor (col. 2, ll. 4-9). Wiggs's circuitry discriminates between the high pressure switch and the low temperature switch as the source of the signal that activated the lock-out relay (col. 2, ll. 29-31). When a high pressure warning light (74) or a low temperature warning light (76) comes on, the light remains on until a serviceman unplugs the heat pump, whereupon the lock-out relay resets (col. 4, ll. 36-64). Wiggs states that "[i]n the broadest sense the present invention provides such a diagnostic unit to monitor a plurality of separate switches responsive to separate events that activate a lock-out relay for terminating current to any apparatus wherein the separate switches automatically reset after the occurrence of the event" (col. 2, ll. 42-48).

The Appellants argue that neither Sharood nor Wiggs discloses monitoring the status of a motor protector as a function of time (Br. 8-9; Reply Br. 2).

The Examiner argues: "In regard to the 'as a function of time' argument, Examiner asserts that the diagnosis, monitoring and control processes are function of time" (Ans. 4).

The relevant definition of "function" is "a quality, trait, or fact dependent on and varying with another".[2] The Examiner has not established that the monitoring by Sharood or Wiggs depends on or varies with time. Sharood merely discloses monitoring an appliance (col. 9, ll. 6-20; col. 10, ll. 17-20). Wiggs monitors a heat pump continuously until a warning signal from a high pressure switch or a low pressure switch activates a lock-out relay, thus terminating current to the compressor motor, whereupon a diagnostic message as to which switch was responsible for the termination remains on until a serviceman unplugs the heat pump and thereby causes the lock-out relay to reset (col. 1, ll. 66 – col. 2, l. 9; col. 4, ll. 60-64). Thus, Wiggs's monitoring does not depend upon or vary with time but, rather, takes place continuously until the heat pump shuts down. Resumption of the monitoring does not depend upon time but, rather, depends upon the serviceman unplugging the heat pump.

The Examiner, therefore, has not established a prima facie case of obviousness of the inventions claimed in the Appellants' claims 1, 9, 10 and 14.

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[2] *Webster's New Collegiate Dictionary* 465 (G. & C. Merriam 1973).

DECISION

The rejection of claims 1, 9, 10 and 14 under 35 U.S.C. § 103 over Sharood in view of Wiggs is reversed.

REVERSED

vsh

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